A Special Announcement From The President

Vern Riportella, WA2LQQ
P.O. Box 27
Washington D.C. 20044
July 12, 1988

Dear AMSAT Colleague:

Well we've done it! Together we've pulled off one of most significant events in the history of OSCARs...and a major milestone in Amateur Radio's distinguished record.

We've launched AMSAT OSCAR 13 and placed it perfectly in its final orbit. The transponders will be on in a few days at most!

And your support as a loyal member has helped us get to this milestone. We couldn't have done it without you!

If you haven't heard, AO-13 has 4 transponders on board.

Mode B	(435 MHz up; 145 MHz down)
Mode JL	(1269 and 145 MHz up; 435 MHz down)
Mode S	(435 MHz up; 2400 MHz down)
RUDAK	(A packet radio digipeater)

And the unique orbit it's in is the one we've been shooting for since the Phase 3 Program began way back in 1976. Up to 18 hours of coverage per day. No more hello/goodbye rushed QSOs. Unprecedented DX. Technical Awards Program. Operating Awards Program. More.

And AO-13 has a re-designed computer which is a thousand times more radiation rugged than its predecessor for added reliability.

It's in orbit, in great shape and will be providing years of enjoyment starting immediately.

So now let the fun begin!

But getting here hasn't been easy. It's taken years of effort and a lot of financial support to achieve this historic moment. And we need your help now to carry on.

Our treasury has been exhausted in building and launching AO-13 and now its up to you to say thanks in the way that will insure AMSAT stays healthy and able to serve your future needs.

I'm counting on you to pitch in and give what you can. Show your appreciation to the folks who've worked years to get you here. Give them a vote of confidence and show you're very proud of them and very proud to be part of the team that pulled it all off.

Cast your vote with a ballot that counts, your generous donation to get us back on our feet. Send $10 or $500 but send your check today so we can continue to serve your needs.

FREE SATELLITE GUIDE

If you'll send at least a $20 gift today, I send you a personal thank you along with a handsome satellite operating guide. The guide gives all the frequencies and modes of all the currently operating OSCARs and Radio Sputniks. I've enclosed a convenient return envelope for your check.

Thanks so much for supporting us and if you need any help getting on AO-13, simply write or call me at AMSAT HQ and I'll see you get the help you need to get going and get your questions answered.

Very 73,

Rip

Rip, WA2LQQ

P.S. Care to call? Try 301-589-6062. And we do take credit cards for donations. Thanks.

AMATEUR RADIO
NEWS RELEASE
THE AMERICAN RADIO RELAY LEAGUE, INC. ■ 225 MAIN STREET, NEWINGTON, CT 06111

May 16, 1988

FOR IMMEDIATE RELEASE

For more information contact:
Maty Weinberg
American Radio Relay League
Newington, CT 06111
203-666-1541 weekdays

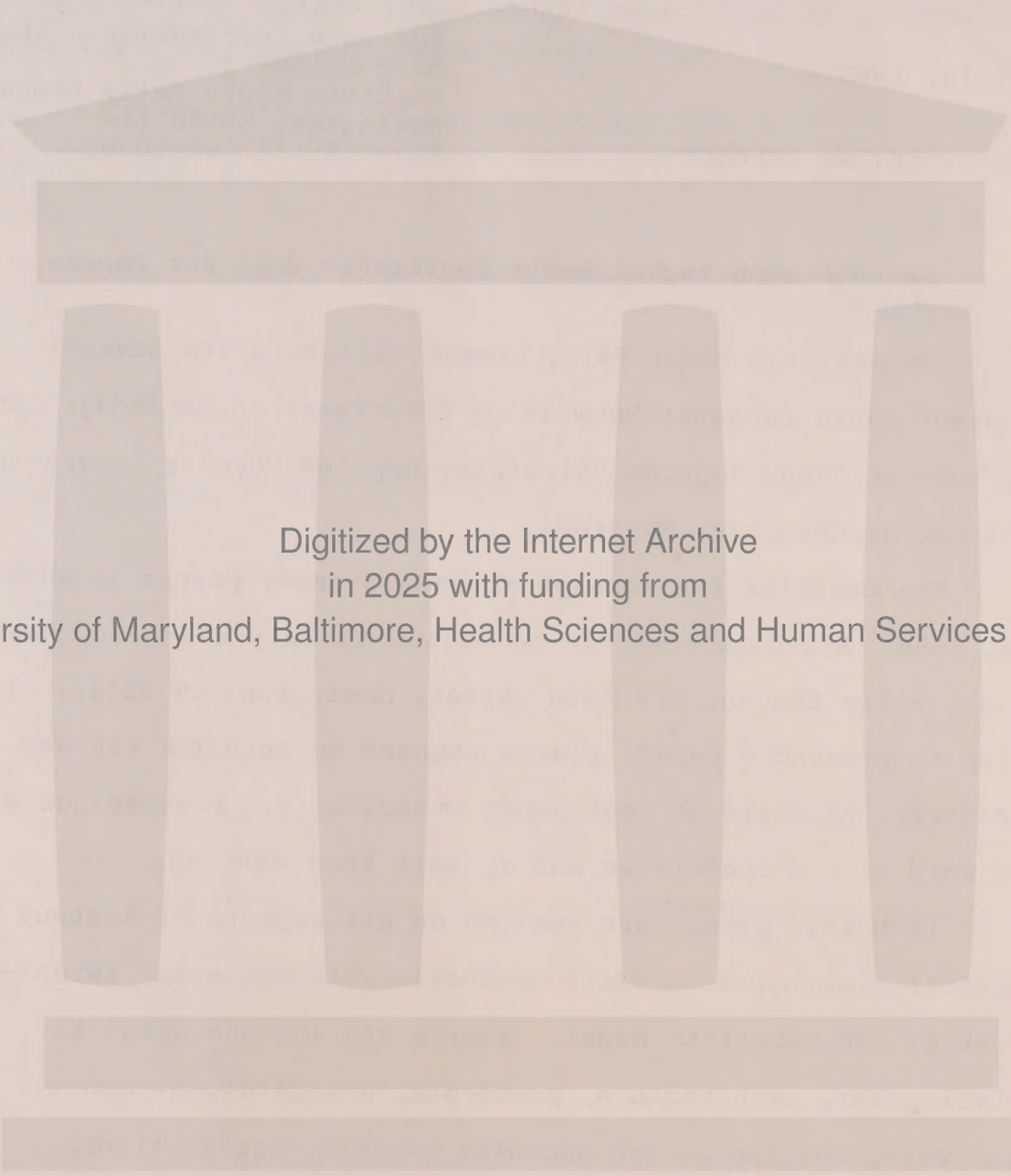
Seventh ARRL Packet Radio Conference Call for Papers

The American Radio Relay League will hold its Seventh Amateur Radio Computer Networking Conference on Saturday, October 1, 1988 at Johns Hopkins University Applied Physics Laboratory in the Laural/Columbia, MD area.

The deadline for receipt of camera-ready papers is August 25, 1988. All papers should be mailed to Maty Weinberg, American Radio Relay League, 225 Main Street, Newington, CT 06111. If you plan to present a paper, please request an author's kit and identify the title of your paper immediately. Proceedings will be sold at the conference and by mail from ARRL HQ.

Technical papers are invited on all aspects of Amateur Radio digital communication via ionospheric, tropospheric, meteor-scatter and satellite modes. Topics may include network development, architecture, protocols, standards, hardware, software, modulation and encoding schemes, applications, frequency planning, and practical experience (such as traffic handling). Of particular interest are digital signal processing, digital speech and image transmission, and new space programs employing digital communication.

-30-



TECH BYTES

SPRING 1988

We're pretty proud of our ARRL Lab, and our pride is growing! There are changes taking place in the lab these days. New walls, fresh paint, new office spaces and modern benches.

We are now looking for a new Lab Supervisor who has sufficient experience in industry to know laboratory procedures and tests standards, and who has the ability to train and counsel laboratory personnel. The ideal candidate would have a design background, and an ability to work with experimenters in the field. Starting salary is $34,000. Contact Chuck Hutchinson, K8CH at HQ.

We also have two openings for Assistant Technical Editors. Successful candidates for this job must be able to write effectively, have a solid grasp of electronic fundamentals and be able to do library research. The ideal candidates would have experience in preparing material for publication, in operating personal computers, and in speaking before groups of people. Starting salary is $25,000. Contact Chuck Hutchinson, K8CH at HQ.

****

Readers of **QST** and **QEX** can benefit from your experience and knowledge. We're always looking for interesting articles for these publications. If you've never written for **QST** or **QEX** before, give it a try! We'll supply you with an Author's Guide and all the help we can. We'll take the manuscript in just about any form: computer printouts on 8-1/2 X 11 sheets, double-spaced; MS- or PC-DOS disk, or even typewritten--(clay tablets are not acceptable). Contact Paul K. Pagel, N1FB, at HQ if you need a seed for an article idea.

****

Is anyone interested in tackling an article for **QEX** on analog cellular telephones/digital cellular systems for mobile voice communications in the amateur service (possibly linked to the Phase 4 satellite).

We have a document concerning this and, although it's a bureaucratic paper that's not too easy to read in places, we feel it contains a story for hams. What is needed is a writer.

If you have the time, talent and interest, let us know and we'll send you more details.

While you're thinking about that, we need similar articles on:

- o autolinking of HF radios
- o Homenet

--Chuck Hutchinson, Technical Editor

*****

We'd like to encourage TAs, TCs and ATCs to get together whenever possible at ARRL conventions. If you want to organize a get-together, we can supply you with mailing labels of TAs, TCs and ATCs in the area.

If a Technical speaker goes to a convention, we could initiate a meeting with the technical troops. We'd send out the invites and line up a meeting place.

This should not be taken as a blank check to have us pick up the expenses, although sometimes that can be accommodated out of division or section budgets.

Let us know what you think of this suggestion.

*****

Call for Papers: **The ARRL Antenna Compendium, Volume 2**

Antennas are my favorite subject. They are also one of the more popular topics in on-the-air conversations, as well as in Amateur Radio literature. Just tune across any active amateur band and copy or listen to the exchanges; you'll probably find antennas being discussed on more than one frequency. Further evidence of this fascination is exhibited by the continuing popularity of **The ARRL Antenna Compendium, Volume 1.** More than 6000 copies have been sold since its appearance in June 1985.

Volume 1 of the **Compendium** contains 31 papers, none of which had previously been published. The topics range literally from A (antennas) to Z (impedance matching). Several papers present ideas and information that even today are not covered in other amateur literature--information that is very pertinent if you want to know about or like to experiment with antennas.

For example, in my opinion (as one of the editors of the book), the paper by Roy Lewallen, W7EL, "Baluns: What They Do and How They Do It," is a classic--"must read" material for antenna experimenters. Another is "Optimum Design of Short Coil Loaded High-Frequency Mobile Antennas," by the late Bruce F. Brown, W6TWW. I could go on, but then this write-up would end up looking like the table of contents for the book.

So much for **Volume 1.** Plans are already being laid for a new publication, **The ARRL Antenna Compendium, Volume 2.** The book will be typeset rather than computer printed, as was done experimentally for **Volume 1.** Drawings will be prepared for publication by our drafting department instead of directly duplicating author-submitted drawings. Yes, based on the success of **Volume 1,** we're planning to make **The ARRL Antenna Compendium, Volume 2** a first-class publication--one that will shine among other antenna publications, and one that its contributing authors will be proud to show off. And, of course, one that will be bursting with really good information about antennas and related subjects. As with **Volume 1, Volume 2** it will contain all new material, no reprints of old stuff. Editing work on the book has already begun. Our plan tentatively calls for appearance of the book in late 1988 or early 1989.

Right now is the time for **you** to think about submitting material for **Volume 2** of the **Compendium,** so you can become a part of these exciting plans. Is there a subject near and dear to your heart related to antennas, transmission lines or propagation effects, one about which you'd like to write a paper? Suggested topics are quads, loop antennas, Yagis, LPDAs, vertical arrays, radial or counterpoise systems, transmission lines, measurements techniques, and results of unusual propagation conditions (especially at VHF/UHF), such as sporadic E, aurora, gray-line or solar eclipse effects. We're especially interested in material related to experience and in construction projects, although tutorial articles will be considered. If your material is accepted for inclusion in **Volume 2,** on publication you'll be paid the standard authors fee set by the ARRL Board of Directors (presently $50 per published page).

Give this idea some serious thought; there is no need for a hasty decision. Maybe you **should** be one of the contributing editors for **Volume 2.** An author's kit is available from HQ to help you prepare your material. Submit your paper to **Antenna Compendium,** Technical Department, ARRL Headquarters, 225 Main St, Newington, CT 06111. Please advise us ahead of time if you plan to submit a paper after June 1, 1988. Thanks!--**Jerry Hall, K1TD, Associate Technical Editor**

****

Maureen Thompson, KA1DYZ, left our staff on April 15, 1987 after more than 10 years with ARRL. Maureen was Assistant Editor of **QEX** and a **QST** handling editor. She was the handling editor for Jerry Sevick's book, **Transmission-Line Transformers.** Maureen has gone to seek her fortune in Colorado. We wish her all the best, and will miss her a lot.

****

We are doing an analysis of proposals for a renovated W1AW. There are some exciting proposals, and that bodes well for the future of W1AW. Have you become involved? Have you donated to the cause? See April **QST** p 48. It's not too late for you to get involved. Thanks to those who have "joined the club" by sending in their donations.

****

QEX now has over 5,000 subscribers. The new format and the solid material for VHF/UHFers has moved this magazine forward. We need good feature articles for **QEX** on packet radio and digital modes. Can you help?

-- Chuck Hutchinson, K8CH, Technical Editor.

73,

Your friends in the ARRL Technical Department

Name & Address	Place of Employment	Expertise	Telephone
John S. Belrose, VE2CV 3 Tadoussac Drive Aylmer, Quebec CANADA J9J 1G1	Department of Communications Director, Radio Communications Lab	Antennas, radiowave propagation, radio communications technology	(H)819-776-4457 (B)613-998-2308
Peter M. Bradley, N1ADX/G4KJZ 5 Granger Road Westboro MA 01581	Northeastern University, Boston Research Associate	Biological effects of radio frequency energy	(H)617-336-2511 (B)617-437-3319
Norman H. Bradshaw, W8EEF 646 E. Glenlord Road St. Joseph MI 49085	Heath Company Metrologist	Test equipment & measurements	(H)616-429-9862 (B)617-982-3482
Dr. John J. Champa, K8OCL 7800 Hartwell Street Dearborn MI 48126	Burroughs Corporation Corp Safety Manager	Saftety and health	(H)313-581-6103 (B)313-972-8205
Lloyd Dean, W9NEY Box 587 Arlington VA 22216	US Navy Electronic Engineer	Direction finding equipment, receiver design, performance and evaluation	(H) --- (B)202-692-5671/5708
Doug DeMaw, W1FB 4061 N. Douglas Road Luther MI 49656	Oak Hills Research & Publishing President	RF circuit design, highperformance receivers & transmitters, solid-state, magnetic-core applications	(H)616-797-5251 (B)616-797-5251
Robert V. C. Dickinson, W2CCE P.O. Box 297 Dillingersville Road Zionsville PA 18902		CATV & CATV/amateur interference (compatability)	(H)215-967-1393 (B)215-967-4445
Hal Feinstein, WB3KDU 1410 North Rhodes St. Arlington VA 22209		Spread-spectrum	
Reed E. Fisher, W2CQH 2 Forum Court Morris Plains NJ 07950	AT&T Bell Labs Technical Supervisor	Antennas, Filters, UHF/VHF/RF circuit design	(H) 201-539-6099 (B) 201-386-5448
David T. Geiser, WA2ANU 3710 Snowden Hill Road New Hartford NY 13413	Retired	RF and microwave components, bridge	(H)315-737-5154
Helge Granberg, K7ES 2144 E. Aurelius Ave. Phoenix AZ 85020	Motoral Incorporated Principal Staff Engineer	Solid-state RF power, HF/VHF	(H)602-943-0401 (B)602-244-4373

Name & Address	Place of Employment	Expertise	Telephone
John Grebenkemper, KI6WX 19490 Miller Court Saratoga CA 95070	Tandem Computers Technical Staff Member	Microwave communications, solar theory	(H)408-865-4291 (B)408-248-2648
Albert E. Hayes, Jr., K6BH P O Box 730 Yucca Valley CA 92286	Western Engineering Company President	Filter and network design, specific applications to EMI problems	(H)619-228-1183 (B)619-228-1173
Wes Hayward, W7ZOI 7700 S.W. Danielle Ave. Beaverton OR 97005	TriQuint Semi-Conductor Design Engineer	Receiver design, RF instrumentation & measuremrnts, network design, QRP	(H)503-646-2754 (B)503-627-3492
Roy Hejhall, K7QWR 4601 E. Mulberry Dr. Phoenix AZ 85018	Motorola Semiconductor Sector Principal Staff Engineer	Solid-state RF power transistors an circuits	(H)602-952-8048 (B)602-244-4374
Albert Helfrick, K2BLA Powerville Road, Box 87 Boonton NJ 07005	Dowty/RFL Industries Principle Electronics Engineer	Specialized modes, UHF/microwaves	(H)201-263-2927 (B)201-334-3100
Michael E. Hiehle, W6RZ 10719 Esterina Way Culver City CA 90230	Hughes Aircraft Company Retired	Antennas (primarily HF/VHF) design, patterns, gain, measurements	(H)213-838-5083 (B) ---
Lawrence S. Higgins, W5QMU 2522 Old Hickory Trail San Antonio TX 78230	Self Employed Physician	Biological effects of RF energy	(H)512-341-2910 (B)512-656-0311
Dick Jansson, WD4FAB 1130 Willowbrook Trail Maitland FL 32751	Martin Marietta Aerospace Sr Staff Engineer - Retired	Thermal design	(H)305-644-9008 (B) ---
L. Edward Kane, W6ONT P. O. Box 361 Lakewood CA 90714	Douglas Aircraft Company Sr. Engineer, Radiating Sys Designer	Antennas & radiation patterns	(H)714-716-2601 (B) ---
Andre Kesteloot, N4ICK 6800 Fleetwood Rd. McLean VA 22101		Spread-Spectrum communications	(H)703-356-5519
Deane E. Kidd, W7TYR 27270 S. W. Ladd Hill Road Sherwood OR 97140	Tektronix Inc Corp New Product Intro Coordinator	Parts-procurement information and test equipment manuals	(H)503-625-7363 (B)503-627-1730

Name & Address	Place of Employment	Expertise	Telephone
Geoffrey H. Krauss, WA2GFP 16 Riviera Drive Latham NY 12110	GE Co/Corp R&D Center Patent Counsel - Elect & Med Systems	VHF-UHF-MW equipment design, construction, test & use	(H)518-785-8689 (B)518-385-3289
Oliver K. Lewis, W4EVV 5524 Sherrill Drive, N. E. Atlanta GA 30342	Am Soc of Htg, Ref, & A/C Eng, Inc Metric Coordinator	Metrics (also heating, ventilating, air conditioning, refridgeration)	(H)404-634-0465 (B)404-636-8400 X 213
Douglas Macheel, K6HLE 6387 Rainbow Dr. San Jose CA 95129	Sylvania Sys Group, GTE Prod Corp Tech Program Mgr/Eng Section Head	VHF/UHF broadband power amplifiers	(H)408-252-1272 (B)415-966-3451
Henry S. Magnuski, KA6M 2019 Barbara Drive Palo Alto CA 94303	Gamma Technology Inc President	Packet Radio	(H)415-854-1927 (B)415-856-7421
John Maguire, AE9I 524 Third Street Manhattan Beach CA 90266	US Air Force, Space Division Systems Engineer	Millimeter wave systems engineer engineer; spacecraft environmental testing	(H)213-318-9792 (B)213-416-7892
Al Markwardt, W5PXH 826 Sherbrook Dr. Richardson TX 75080	Retired On call technical instructor	RFI, antennas, HF linear amplifiers HF Transceivers, microprocessors, specialty quad arrays, line flattne	(H)214-235-0996 (B)214-234-7786
Walter Maxwell, W2DU 243 N. Cranor Ave. DeLand FL 32720	RCA Corporation Retired	Specialists in antennas & transmission lines	(H)904-736-9789 (B) ---
Doug Millar, K6JEY 3742 Stockman St. National City CA 92050	St. Timothy Lutheran Church Sr. Pastor	Metrology	(H) 619-267-3798 (B) 619-475-1475
Joseph D. Moell, K0OV P.O. Box 2508 Fullerton CA 92633	Hughes Aircraft Co, Ground Systems Grp Head of Transmitter Subsystems Section	Transmitter hunting (radio direction finding)	(H)714-879-6895 (B)714-732-3273
John E. Montague, WORUE 939 Arbor Mahtomedi MN 55115	Audio Bionics, Inc Director of Engineering	Microprocessors, digital communication, digital system design, voice synthesis, display technology	(H)612-426-5673 (B)612-941-5464
J.P. Neil, P.E., KN6B 2336 Hilo Court Mountain View CA 94040	Self Employed Consulting Engineer	Telephony and related matters (equipment; system design; applications; and practices)	(H)415-967-7579 (B)415-967-7579

Name & Address	Place of Employment	Expertise	Telephone
Paul Newland, AD7I P. O. Box 205 Holmdel NJ 07733-0205	AT&T Information Systems Laboratories Member of Technical Staff	Digital communications	(H)201-671-8107 (B)201-834-1149
Tom O'Hara, W6ORG 2522 Paxson Lane Arcadia CA 91006	P. C. Electronics Owner	Amateur television	(H)213-446-2750 (B)213-447-4565
Richard K. Olsen, N6NR 7601 Lansing Drive Lemon Grove CA 92045	Lunar Industries, Inc VP, Product Operations	Digital signal processing (sampling theory, remote bases, UHF & microwave solid-state	(H)619-469-8211 (B)619-457-1000 X 346
Robert S. Parnass, AJ9S 2350 Douglas Road Oswego IL 60543	Bell Laboratories Technical Staff Member	Computer science, data communications, equipment repair, short wave listening	(H) --- (B)312-979-5414
Daniel N. Peterson, WA6OIL Route 1, Box 11AA LaCenter WA 98629	Loral Microwave Sr. Engineering Technician	Microwave applications	(H)206-263-2878 (B) ---
Andrew Pfeiffer, K1KLO 132 Whippoorwill Road Old Lyme CT 06371	Self Employed Medical Research Consultant	Consultant in mechanical structure & fine mechanism design	(H)203-434-5621 (B)203-434-5621
Emil Pocock, W3EP RR 3, Box 70 Route 207 Lebanon CT 06249	Eastern Connecticut State University	Radio propagation	(H) (B)203-456-2231
Robert B. Rose, K6GKU 1242 Cresthill Road El Cajon CA 92021	US Naval Ocean Systems Center Head, Ionospheric Assess Sys Branch	HF propagation and solar/ionospheric effects	(H)714-588-1200 (B)714-225-6184
Tom Russell, N4KG Route 1 Box 705-C Harvest AL 35805	Chrysler Corporation Sr Design Engineer	HF station design - receivers, transceivers, antenna systems, towers, propagation	(H)205-233-1402 (B)205-895-1934/1935
Kerry R. Sandstrom, K5KS 9529 Gidding NE Albuquerque NM 87109	Air Force Weapons Lab Technical Advisor, Systems Assessment	Bilogical effects, electromanetic compatibility, measurements	(H)505-828-1910 (B)505-844-5809
Peter J. Schram, W9UBP 12 Royal Lake Drive Braintree MA 02184	National Fire Protection Assoc	Electrical safety expert, SNF National Electric Code	(H)617-848-9677 (B)617-770-3000

Name & Address	Place of Employment	Expertise	Telephone
Jerry Sevick, W2FMI 32 Granville Way Basking Ridge NJ 07920	Bell Laboratories, Inc Director, Technical Relations	Antennas & transmission line transformers	(H)201-766-6122 (B)201-582-3717
William A. Shaheen, N1CQ 49 South Street Granby MA 01033	University of Connecticut Research Associate (also Private Consu	Applied mechanics, structural stability, foundation/anchorage systems	(H)413-467-9075 (B)203-486-4537
Richard Simpson, W6JTH 3326 Kipling St. Palo Alto CA 94306	Stanford University Senior Research Associate	Radiowave propagation, EME & related activities	(H)415-494-9272 (B)415-497-3525
Nathan O. Sokal, WA1HQC 4 Tyler Road Lexington MA 02173-2404	Design Automation Inc President	RF power amplifiers & radio transmitters; switching-mode dc power conversion	(H)617-862-2388 (B)617-862-8998
Roger Stephens, K5VRX 6818 Westlawn Drive Falls Church VA 22042	US Dept of Labor - OSHA Sr Industrial Engineer/Ergonomist	BIO hazards	(H)703-532-1111 (B)
Kenneth L. Stuart, W3VVN 48 Johnson Road Riviera Beach MD 21122	Gould; Defense Electronic Division Electronic Design Engineer	Power supplies (voltage regulators) - switching & analog, DC-DC converters, etc) & analog circuitry	(H)301-437-1758 (B)301-787-3748
Jeff H. Walker, W3JW 4517 Three Sisters Drive Pasadena MD 21122	ITT Research Institute Project Manager	Equipment performance measurement & EMC	(H)301-437-0171 (B)301-267-2554
Richard L. Webster, K9ULW 512 Dows Road SE Cedar Rapids IA 52401	Rockwell International/Collins Div Project Engineer	Quality, test methods, test equipment for communications equipment, HF communication systems	(H)319-377-8160 (B)319-395-4169
Edward E. Wetherhold, W3NQN 102 Archwood Ave. Annapolis MD 21401	Honeywell Inc Senior Engineer	Passive LC filters	(H)301-268-0916 (B)301-266-1769
Andrew B. White, K9CW 1105 S. Orchard St. Urbana IL 61801	HAL Communications Corp R & D Head	Microprocessors, digital circuits, data communications	(H)217-367-1812 (B)217-367-7373
Glenn L. Williams, AF8C 513 Kenilworth Road Bay Village OH 44140	Gould Inc/Recording Systems Div Program Manager	Digital signal processing, ASCII, digital, computer hardware, software, packet radio	(H)216-835-4897 (B)216-361-3315 X 396

Name & Address	Place of Employment	Expertise	Telephone
Paul M. Wilson, W4HHK 226 Peterson Lake Rd. P. O. Box 73 Collierville TN 38017	Self Employed Photographer	EME, MS and UHF	(H)901-853-7373 (B)901-853-7373
Brian Wood, WØDZ 710 Grove Court Loveland CO 80537	Hewlett-Packard Technical Staff Member	Microprocessors, digital design, software, RTTY	(H)303-667-7382 (B)303-667-5000 X 2915
Bob Zavrel, W7SX c/o Digital RF Solutions Corp 3080 Olcott Street, Suite 200D Santa Clara CA 95054-3209	Digital RF Solutions Corp	RF/audio circuits, RF mixers, analog switches	(H)408-267-4229 (B)408-746-1383
David A. Zinder, W7PMD 4121 W. Augusta Phoenix AZ 85021	Sperry Flight Systems Principal Engineer	Power supplies and AC power systems	(H)602-939-1143 (B)602-863-7257